Panasonic

900MHz Cordless Phone

Operating Instructions

Model No. KX-TC1484B

Pulse-or-tone dialing capability

Caller ID Compatible

PLEASE READ BEFORE USE AND SAVE.

Charge the battery for about 15 hours before initial use.

Panasonic World Wide Web address: http://www.panasonic.com
for customers in the USA or Puerto Rico

Before Initial Use

Please read IMPORTANT SAFETY INSTRUCTIONS on page 34 before use. Read and understand all instructions.

Thank you for purchasing your new Panasonic cordless telephone.

Caller ID and Call Waiting Service, where available, are telephone company services. After subscribing to Caller ID, this phone will display a caller's name and phone number. Call Waiting Caller ID, which displays a second caller's name and phone number while the user is on another call, requires a subscription to both Caller ID and Call Waiting.

Attach your purchase receipt here.

For your future reference

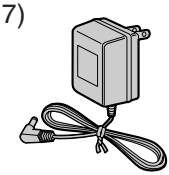
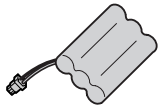
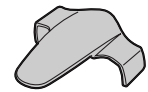
Serial No. _____
(found on the bottom of the unit)

Date of purchase _____

Name and address of dealer _____

Accessories (included)

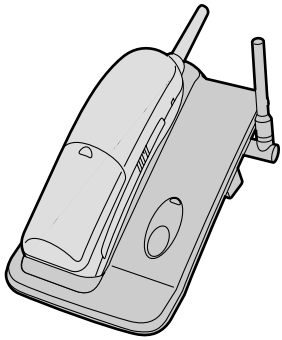
For extra orders, call 1-800-332-5368.

☐ AC Adaptor (p. 7) Order No. PQWATC1461M  one	☐ Telephone Line Cord (p. 7) one	
☐ Battery (p. 8) Order No. PQWBTC1461M  one	☐ Handset Cover (p. 8) Order No. PQYNTC1461B one	☐ Belt Clip (p. 27) Order No. PQZHTC1481B  one

For Best Performance

Battery Charge

A rechargeable Ni-Cd battery powers the handset. Charge the battery for about **15 hours** before initial use (p. 8).

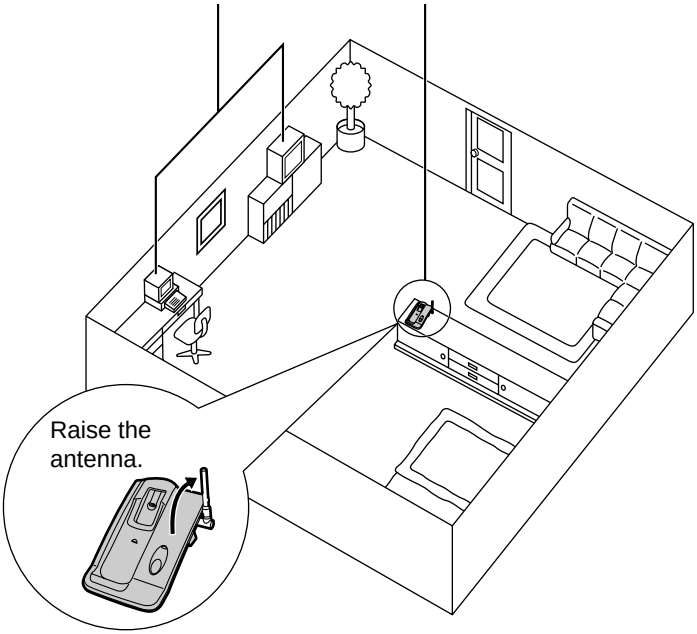


Base Unit Location

Calls are transmitted between the base unit and the handset using wireless radio waves. **For maximum distance and noise-free operation**, the recommended base unit location is:

Away from electrical appliances such as a TV or personal computer.

In a HIGH and CENTRAL location with no obstructions such as walls.



Contents

Preparation

Location of Controls 5

Settings 7
- Connections 7
- Installing the Battery..... 8
- Battery Charge 8
- Ringer Volume 9

Programmable Functions 10
- Display Language 10
- Dialing Mode 10

Basic Operation

Making Calls 11

Answering Calls 12

Caller ID Service 13

Using the Caller List 15
- Viewing the Caller List..... 15
- Calling Back from the Caller List..... 17
- Editing the Caller's Phone Number 17
- Storing Caller List Information in the Phone Book..... 18
- Erasing Caller List Information 19

Advanced Operation

Phone Book 20
- Storing Names and Numbers..... 20
- Entering Names and Symbols 21
- Finding Stored Items 22
- Dialing 22
- Editing 23
- Erasing 24

Special Features 25
- Automatic Security Code Setting 25
- Handset Locator 25
- Temporary Tone Dialing (For Rotary or Pulse Service Users) 25
- How to Use the PAUSE Button (For PBX Line/Long Distance Calls)..... 26
- For Call Waiting Service Users..... 26

Useful Information

Belt Clip 27

Optional Headset 27

Wall Mounting 28

Adding Another Phone 29

Battery Replacement 30

Troubleshooting **31**

Important Safety Instructions 34

FCC and Other Information ... 36

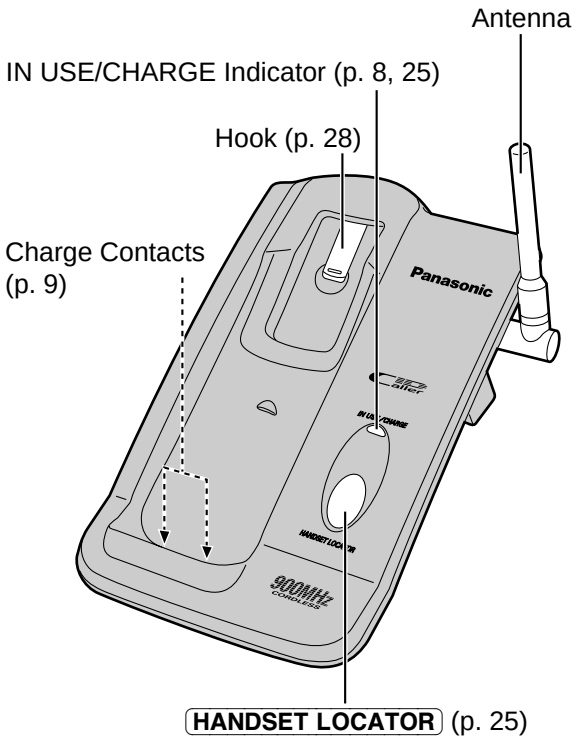
Specifications 39

Index 40

Warranty 41

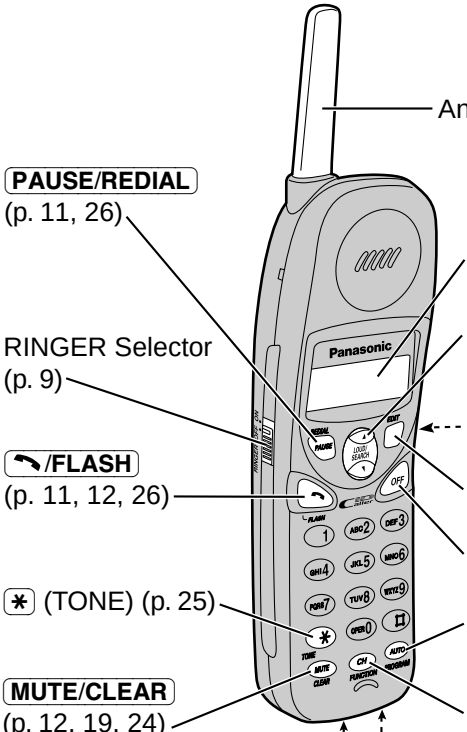
Location of Controls

Base unit



Location of Controls

Handset



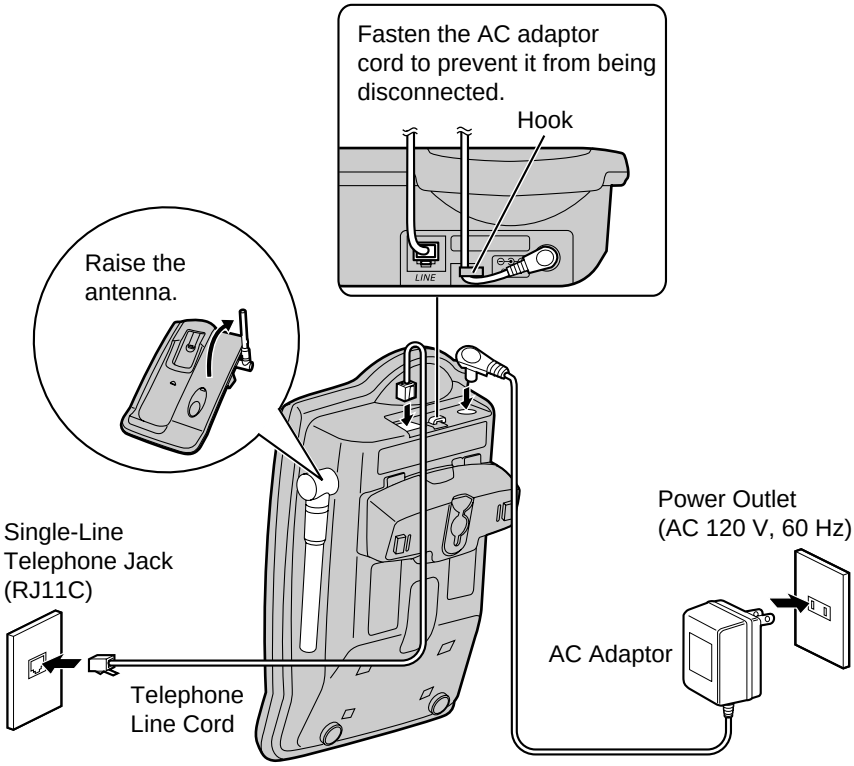
How to use the LOUD/SEARCH key

This key has two active areas that are indicated by arrows.

- Pressing the up or down arrow allows you
  - —to enter into the Caller List,
  - —to select the function items,
  - —to scroll through your phone book and the Caller List, and
  - —to adjust the receiver volume on the handset.

Throughout these Operating Instructions, the LOUD/SEARCH key is indicated by the arrows ▲ or ▼.

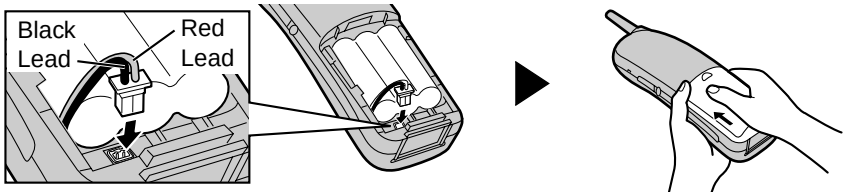
Connections


Fasten the AC adaptor cord to prevent it from being disconnected.
Hook
LINE
Raise the antenna.
Single-Line Telephone Jack (RJ11C)
Telephone Line Cord
Power Outlet (AC 120 V, 60 Hz)
AC Adaptor

- USE ONLY WITH Panasonic AC ADAPTOR PQWATC1461M (Order No. PQWATC1461M).
- The AC adaptor must remain connected at all times. (It is normal for the adaptor to feel warm during use.)
- To connect a standard telephone on the same line, see page 29.
- If your unit is connected to a PBX which does not support Caller ID services, you cannot access those services.

Installing the Battery

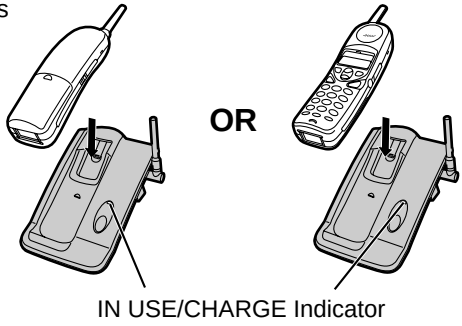
Install the battery and close the handset cover, locking it into place.



Battery Charge

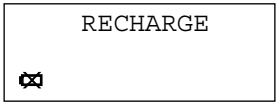
Place the handset on the base unit and charge for about **15 hours** before initial use.

- The IN USE/CHARGE indicator lights and a beep sounds.



Recharge

Recharge the battery when:
—"RECHARGE" is displayed,
—"🖂" is displayed, or
—the handset beeps intermittently while it is in use.



Battery information

After your Panasonic battery is fully charged (p. 8):

Operation	Operating time
While in use (TALK)	Up to about 5 hours
While not in use (Standby)	Up to about 5 days

- The battery operating time may be shortened depending on usage conditions, such as viewing the Caller ID Caller List or phone book, and ambient temperature.
- **Clean the handset and the base unit charge contacts with a soft, dry cloth once a month. Clean more often if the unit is subject to grease, dust or high humidity.** Otherwise the battery may not charge properly.
- If the battery is fully charged, you do not have to place the handset on the base unit until "RECHARGE" and " " are displayed. This will maximize the battery life.
- The battery cannot be overcharged.

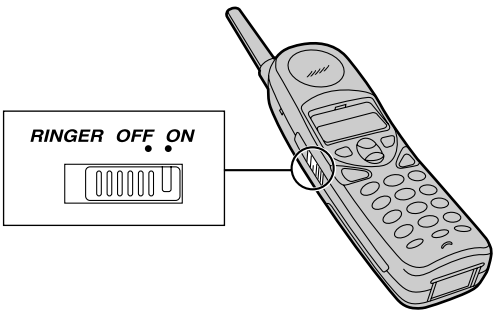
Standby Mode (While the handset is off the base unit)

The handset goes into the standby mode after you finish using the handset (making/answering a call, viewing the Caller List or phone book etc.). The display shows "STANDBY".
The battery operating time is conserved in this mode.

Ringer Volume

Set the RINGER selector to ON or OFF.

- When set to OFF, the unit will not ring.



Programmable Functions

You can program the following function items **using the handset near the base unit**.

Make sure the unit is in the standby mode.

- You can exit the programming mode at any time by pressing **OFF**.
- If you do not press any buttons for 60 seconds, the unit will return to the standby mode.

Display Language

You can select ENGLISH, SPANISH or FRENCH as the display language. Your phone comes from the factory set to ENGLISH. If you want to select the other language, program as follows:

1 Press **CH/FUNCTION**.
- The current setting is displayed.

```
LANGUAGE: ENG
```

2 Select "ENG" (ENGLISH), "ESP" (SPANISH) or "FRA" (FRENCH) by using ▼ or ▲.

Ex. SPANISH is selected.

```
IDIOMA: ESP
```

3 Press **EDIT** to save.
- A beep sounds.
- The handset will return to the standby mode.

Dialing Mode

If you have touch tone service, set to TONE. If rotary or pulse service is used, set to PULSE. Your phone comes from the factory set to TONE.

1 Press **CH/FUNCTION** twice.
- The current setting is displayed.

```
DIAL MODE: TONE
```

2 Select "PULSE" or "TONE" by using ▼ or ▲.

```
DIAL MODE:PULSE
```

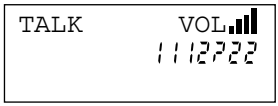
3 Press **EDIT** to save.
- A beep sounds.
- The handset will return to the standby mode.

Making Calls

To have a hands-free conversation, connect an optional headset to the handset (p. 27).

1 Press **/FLASH**.
- After a few seconds, the display will show the receiver volume.

2 Dial a telephone number.
- The dialed number is displayed.

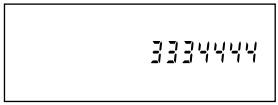


3 To hang up, press **OFF** or place the handset on the base unit.

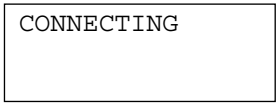
- If an alarm tone sounds in step 1, move closer to the base unit or place the handset on the base unit, and try again.
- If additional dialing is necessary after using speed dialing functions such as phone book dialing (p. 22) or REDIAL, wait until speed dialing is finished to continue further dialing. Otherwise, the unit may not dial properly.

To dial after confirming the entered number (Predial)

1 Dial a phone number.
- If you misdial, press **MUTE/CLEAR**. One digit is erased from the right. Dial the correct phone number.



2 Press **/FLASH**.
- After a few seconds, the display will show the receiver volume and phone number.



3 To hang up, press **OFF** or place the handset on the base unit.

To redial the last number dialed

Press **/FLASH** ➡ **PAUSE/REDIAL**.

To redial after confirming the last number dialed

Press **PAUSE/REDIAL** ➡ **/FLASH**.

If noise interferes with the conversation

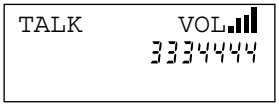
Press **CH/FUNCTION** to select a clearer channel in the talk mode or move closer to the base unit.

To select the receiver volume

Press ▲ or ▼ while talking.

- Each time you press ▲ or ▼, the volume level will change by 4 levels.

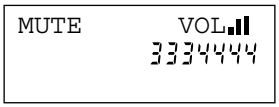
Ex. Receiver volume: level 4



To mute your conversation

Press **MUTE/CLEAR** while talking.

- "MUTE" and the receiver volume are displayed.
- The other party cannot hear you but you can hear them.



To resume the conversation

Press **MUTE/CLEAR** again.

Answering Calls

When a call is received, the unit rings and the IN USE/CHARGE indicator on the base unit flashes quickly. If you subscribe to a Caller ID service, the calling party information will be displayed after the first ring (p. 13). If you do not subscribe to a Caller ID service, "INCOMING CALL" will be displayed. In order to view the Caller ID information, please wait until the second ring to answer a call.

Lift the handset off the base unit and press **/FLASH**.

- You can also answer a call by pressing any button except **OFF** (**Any Key Talk**).

When an optional headset is connected (p. 27), make sure to use the headset to talk with the caller. If you want to have a normal cordless phone conversation, disconnect the headset.

Backlit LCD display

The lighted handset display will stay on for a while after pressing a handset button.

Caller ID Service

This unit is compatible with a Caller ID service offered by your telephone company. If you subscribe to a Caller ID service, the calling party's information will be displayed after the first ring.

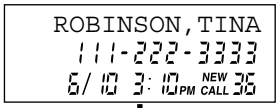
The unit can record information of up to 40 callers, including the date and time received, in the Caller List. When the 41st call is received, the first call is deleted.

Using the list, you can automatically call back a caller. You can store the callers' numbers from the Caller List into the phone book.

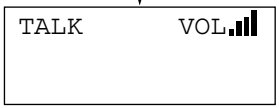
If you subscribe to a Call Waiting Caller ID Feature, when a second call is received while talking, the new caller's name, phone number and the date and time received will be displayed (p. 26).

How caller information is displayed when a call is received

The display shows the caller's name, phone number and the date and time received after the first ring.



After you answer the call, the display will show the receiver volume.



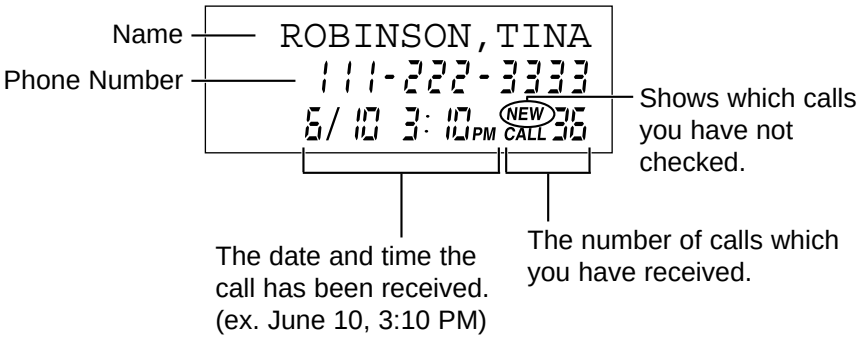
- Caller information cannot be displayed in the following cases:
  - —If the caller dialed from an area which does not provide a Caller ID service, the display will show "OUT OF AREA".
  - —If a long distance call is identified, and the caller's name and/or number cannot be received, the display will show "LONG DISTANCE".
  - —If the caller has requested not to display his/her information, the display will show "PRIVATE CALLER".
  - —If the Caller ID information is interfered with during reception, the display will show "ERROR".
- If your unit is connected to a PBX which does not support Caller ID services, you cannot access those services.
- The name display service may not be available in some areas. For further information, please contact your telephone company.

To check the number of new calls

If you have received 10 new calls, the display will show the following:

```
NEW CALL 10
```

What the display means


Name
Phone Number
ROBINSON,TINA
111-222-3333
6/10 3:10 PM
NEW CALL 36
Shows which calls you have not checked.
The date and time the call has been received. (ex. June 10, 3:10 PM)
The number of calls which you have received.

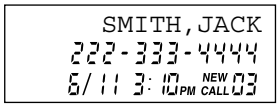
Using the Caller List

Viewing the Caller List

To check who has called, follow the steps below.
Make sure the unit is in the standby mode.

1 Lift the handset off the base unit and press ▼ or ▲ to enter the Caller List.

- The display will show, for example, the following:



2 To search from the most recent call, press ▼.
To search from the oldest call, press ▲.

- To scroll between callers, press ▼ or ▲.

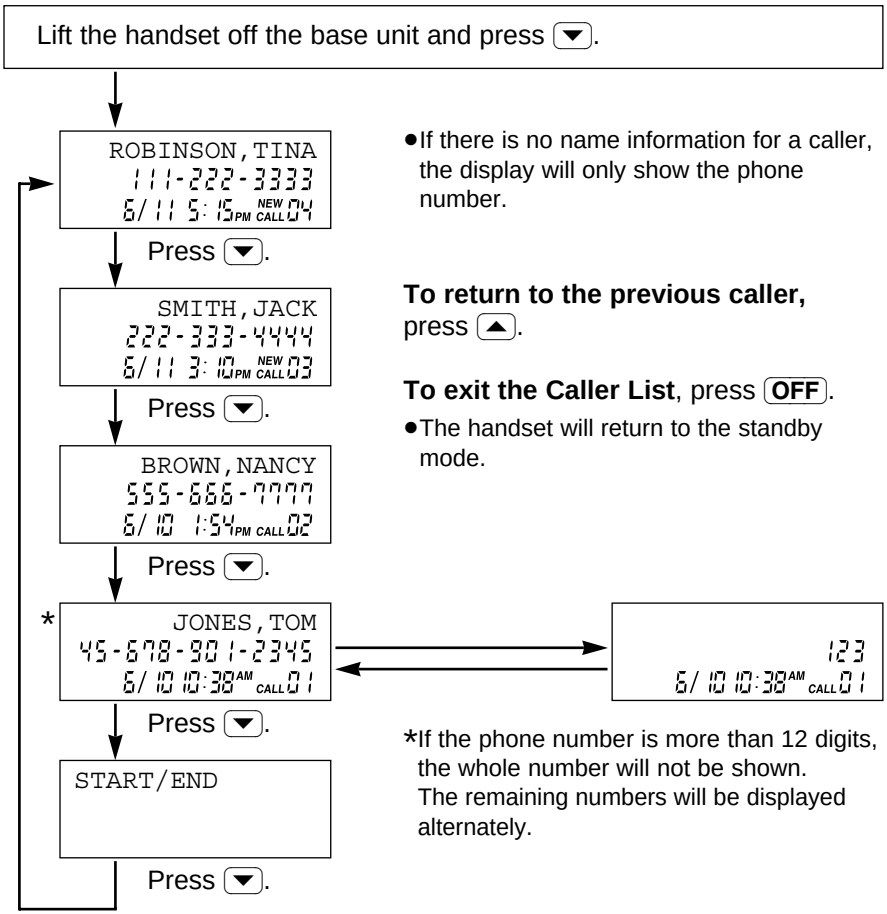
3 To exit the list, press **OFF**.

- A beep sounds and the handset will return to the standby mode.

- If the Caller List is empty, you cannot enter the Caller List by pressing ▼ or ▲.
- Once new calls have been checked, "NEW" will not be displayed.
- If you do not press any buttons for 60 seconds, the unit will return to the standby mode.

Using the Caller List

Ex. When you search from the most recent call:



- If there is no name information for a caller, the display will only show the phone number.

To return to the previous caller, press ▲.

To exit the Caller List, press **OFF**.

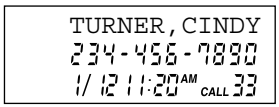
- The handset will return to the standby mode.

***If the phone number is more than 12 digits, the whole number will not be shown. The remaining numbers will be displayed alternately.

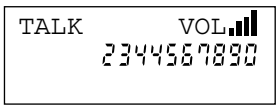
Calling Back from the Caller List

1 Lift the handset off the base unit and press ▼ or ▲ to enter the Caller List.

2 Scroll to the desired caller by using ▼ or ▲.



3 Press **/FLASH**.
- The displayed phone number is dialed automatically.



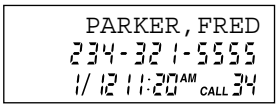
- In some cases, you may have to edit the number before dialing (See below).
- If a phone number is not displayed in the caller information, you cannot call back that caller.

Editing the Caller's Phone Number

The unit can edit a phone number into one of 3 patterns.
Make sure the unit is in the standby mode.

1 Lift the handset off the base unit and press ▼ or ▲ to enter the Caller List.

2 Scroll to the desired caller by using ▼ or ▲.



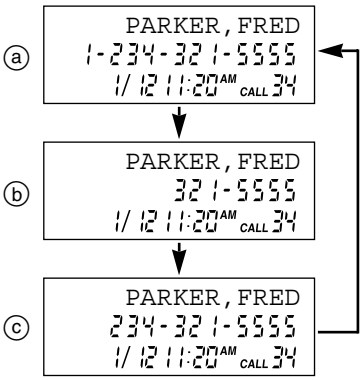
3 Press **EDIT** to select a pattern.
- Each time you press **EDIT**, the number is rearranged into one of 3 different patterns.

ⓐ 1 – Area code – Phone no.

ⓑ Phone no.

ⓒ Area code – Phone no.

- The order in which patterns ⓐ–ⓒ are displayed depends on how the telephone number is displayed in step 2.



4 After editing the number, you can continue with calling back or storing procedures.
To call back, press **/FLASH** (See above).
To store the number in the phone book, press **AUTO/PROGRAM**.
Follow the instructions on the display (p. 18).

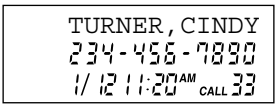
- The number edited in step 3 will not be maintained in the Caller List.

Storing Caller List Information in the Phone Book

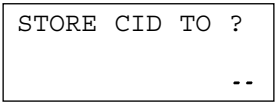
You can store numbers that are in the Caller List in the phone book.
Make sure the unit is in the standby mode.

1 Lift the handset off the base unit and press ▼ or ▲ to enter the Caller List.

2 Scroll to the caller you want to store in the phone book by using ▼ or ▲.
- If the number requires editing, see page 17.



3 Press **AUTO/PROGRAM**.
- "CID" stands for Caller ID information.



4 Press a memory station number (**0** to **9**).
- A beep sounds.
- The handset will return to the standby mode.

- You can exit the programming mode at any time by pressing **OFF**.

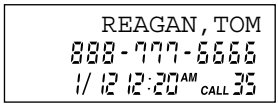
Erasing Caller List Information

After checking the Caller List, you can erase some or all of the entries.
Make sure the unit is in the standby mode.

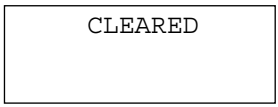
To erase a specific caller from the Caller List

1 Lift the handset off the base unit and press ▼ or ▲ to enter the Caller List.

2 Scroll to the caller you want to erase from the Caller List by using ▼ or ▲.



3 Press **MUTE/CLEAR**.
- A beep sounds and the information is erased.
- After a few seconds, the display will show the next or previous caller information.

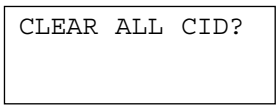


To erase all entries in the Caller List

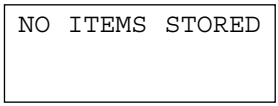
Before erasing all entries, make sure that "NEW" is not displayed in the recent Caller List.

1 Lift the handset off the base unit and press ▼ or ▲ to enter the Caller List.

2 Press and hold **MUTE/CLEAR** until "CLEAR ALL CID?" is displayed.
- "CID" stands for Caller ID information.



3 Press **MUTE/CLEAR**.
- A beep sounds and all entries are erased.
- The handset will return to the standby mode.



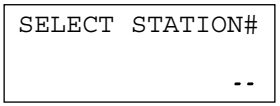
Phone Book

You can store up to 10 names and phone numbers in the phone book. Using the phone book, you can make a call by selecting a name on the handset display.

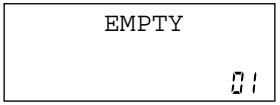
Storing Names and Numbers

Make sure the unit is in the standby mode.

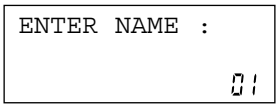
1 Press **AUTO/PROGRAM**.



2 Press a memory station number (**0** to **9**).
- If an item is already stored, that information is displayed.

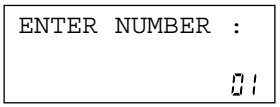


3 Press **EDIT**.



4 Enter a name, up to 15 characters, using the dialing buttons (**1** to **9**), ▼ or ▲.
- See the steps for entering names and symbols (p. 21).
- If a name is not required, press **EDIT** and go to step 6.

5 Press **EDIT**.



6 Enter a phone number, up to 24 digits.
- Each time you press **MUTE/CLEAR**, the digit is erased from the right. To erase all of the digits, press and hold **MUTE/CLEAR**.
- To show the cursor, press ▼ after entering a digit. Each time you press **MUTE/CLEAR**, the digit under the cursor is erased.
- When you store the last number dialed, press **PAUSE/REDIAL** instead of entering a phone number.

7 Press **EDIT** to save.
- A beep sounds.
- The handset will return to the standby mode.

- If a pause is required for dialing, **PAUSE/REDIAL** can be stored in a phone number counting as one digit (p. 26) in step 6.
- You can exit the programming mode at any time by pressing **OFF**.
- If you do not press any buttons for 60 seconds, the unit will return to the standby mode.

Entering Names and Symbols

The handset dialing buttons (1 to 9), ▼ and ▲ can be used to enter letters and symbols. The letters are printed on the dialing buttons. Pressing each button selects a character as shown below.

	Number of times key is pressed			
Keys	1	2	3	4
1	Blank	–	✳	!
2	A	B	C	(
3	D	E	F	)
4	G	H	I	"
5	J	K	L	’
6	M	N	O	;

	Number of times key is pressed			
Keys	1	2	3	4
7	P	Q	R	S
8	T	U	V	?
9	W	X	Y	Z
▼	To move the cursor to the left			
▲	To move the cursor to the right			

- To show the cursor, press ▼ after entering a character.
- To enter another character using the same dialing button, press ✳ or wait for 3 seconds.

If you make a mistake while entering a name

Use ▼ or ▲ to move the cursor to the incorrect character, press **MUTE/CLEAR** to delete and enter the correct character. Each time you press **MUTE/CLEAR**, a character under the cursor is erased.
To erase all characters, press and hold **MUTE/CLEAR**.

For example, to enter “TOM”:

1 Press **AUTO/PROGRAM**.

2 Press a memory station number (0 to 9).

3 Press **EDIT**.

```
ENTER NAME :
                01
```

4 Press 8.

```
                T
```

5 Press 6 three times, then wait for 3 seconds.

```
               TO
```

6 Press 6.

```
              TOM
                01
```

7 When finished, press **EDIT** to save.
- Follow steps 6 and 7 on page 20 to complete the operation.

```
ENTER NUMBER :
                01
```

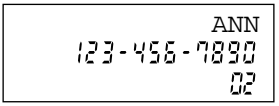
- If you enter a blank, press 1.
- To show the cursor, press ▼ after entering a character. While entering names, the cursor will flash on the display.

Finding Stored Items

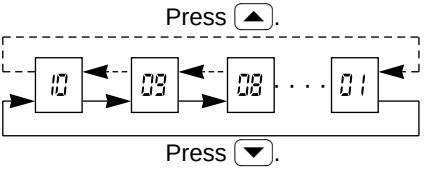
Make sure the unit is in the standby mode.

1 Press **AUTO/PROGRAM**.

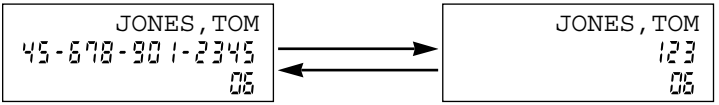
2 Press ▲ or ▼.
- The first item or last item is displayed.



3 Scroll to the desired item by using ▲ or ▼.



- You can find the items using the memory station numbers (**0** to **9**) directly in step 2.
- You can exit the phone book at any time by pressing **OFF**.
- If "EMPTY" is displayed in step 2 or 3, the phone book is empty.
- If the phone number is more than 12 digits, the whole number has not been shown. The remaining numbers will be displayed alternately.

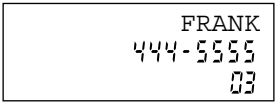


Dialing

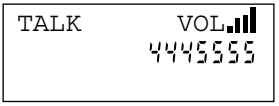
1 Press **AUTO/PROGRAM**.

2 Press ▲ or ▼.
- The first item or last item is displayed.

3 Scroll to the phone book item that you want to dial by using ▲ or ▼.



4 Press **/FLASH**.
- The number is dialed automatically.



5 To hang up, press **OFF** or place the handset on the base unit.

- You can find the items using the memory station numbers (**0** to **9**) directly in step 2.
- You can exit the phone book at any time by pressing **OFF**.

■If you press /FLASH first, follow the steps below:

Press **/FLASH** ➡ **AUTO/PROGRAM** ➡ Station Number (**0** to **9**).
(▲ and ▼ cannot be used for finding the items.)

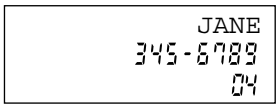
Editing

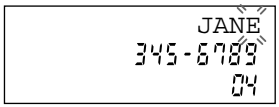
Make sure the unit is in the standby mode.

1 Press **AUTO/PROGRAM**.

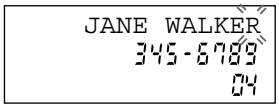
2 Press ▲ or ▼.
- The first item or last item is displayed.

3 Scroll to the phone book item you want to change by using ▲ or ▼, and press **EDIT**.

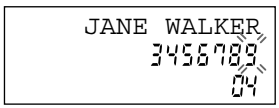




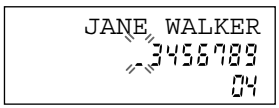
4 Edit the name using the dialing buttons, ▼ or ▲ (p. 21), up to 15 characters.

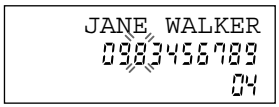


5 Press **EDIT**.



6 Add a number to the current number.
- If you do not need to change the number, go to step 7.
- To move the cursor, press ▼ or ▲. The digit is added to the right of the cursor. Each time you press **MUTE/CLEAR**, the digit under the cursor is erased. To erase all of the digits, press and hold **MUTE/CLEAR**.





7 When finished, press **EDIT** to save.
- A beep sounds.
- The handset will return to the standby mode.

- You can find the items using the memory station numbers (**0** to **9**) directly in step 2.
- You can exit the phone book at any time by pressing **OFF**.

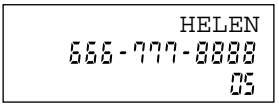
Erasing

Make sure the unit is in the standby mode.

To erase a specific caller from the Phone book

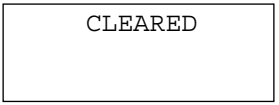
1 Press **AUTO/PROGRAM**.

2 Press ▲ or ▼.
- The first item or last item is displayed.



3 Scroll to the phone book item you want to erase by using ▲ or ▼.

4 Press **MUTE/CLEAR**.
- A beep sounds.
- The handset will return to the standby mode.



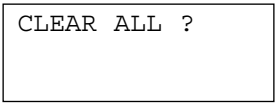
- You can find the items using the memory station numbers (**0** to **9**) directly in step 2.
- You can exit the phone book at any time by pressing **OFF**.

To erase all entries in the Phone book

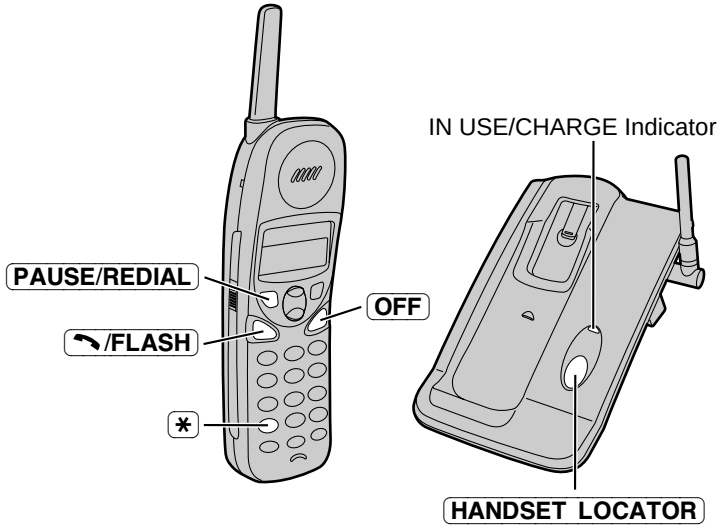
1 Press **AUTO/PROGRAM**.

2 Review phone book record by using ▲ or ▼.

3 Press and hold **MUTE/CLEAR** until "CLEAR ALL ?" is displayed.



4 Press **MUTE/CLEAR**.
- A beep sounds and all entries are erased.
- The handset will return to the standby mode.



Automatic Security Code Setting

Each time you place the handset on the base unit, the unit automatically selects one of more than 65,000 security codes. These codes help prevent the unauthorized use of your telephone line by another cordless telephone user.

Handset Locator

You can locate the handset or page the handset user with beep tones from the base unit.

1 Press **HANDSET LOCATOR**.
- The IN USE/CHARGE indicator flashes. The handset beeps for 1 minute and "PAGING" is displayed on the handset.

2 To stop paging, press **HANDSET LOCATOR** again or press **OFF** on the handset.

Temporary Tone Dialing
(For Rotary or Pulse Service Users)

Press ✱ before entering access numbers which require tone dialing.

- The dialing mode changes to tone. You can enter numbers to access an answering service, electronic banking service, etc. When you hang up, the mode will return to pulse.

How to Use the PAUSE Button
(For PBX Line/Long Distance Calls)

We recommend you press **PAUSE/REDIAL** if a pause is required for dialing with a PBX or to make a long distance call.

Ex. Line access number **9** (PBX)
9 ➡ **PAUSE/REDIAL** ➡ Phone number

- Pressing **PAUSE/REDIAL** once creates a 3 second pause. This prevents misdialing when you redial or dial a stored number.
- Pressing **PAUSE/REDIAL** more than once increases the length of the pause between numbers.

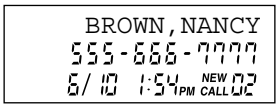
For Call Waiting Service Users

Press **/FLASH** if you hear a call-waiting tone while talking.

- The first call is put on hold and you can answer the second call.
- To return to the first caller, press **/FLASH** again.
- The call waiting service cannot be used when a parallel connected telephone is in use.
- If this function does not operate properly, consult your telephone company for details.

Call Waiting Caller ID Feature

Call Waiting Caller ID Feature allows your unit to display the second caller's information. After you hear a call-waiting tone while talking, the unit will display the caller's name, the phone number and the date and time received.

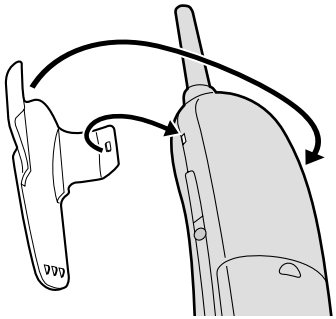


- Please contact your telephone company for details and availability in your area.

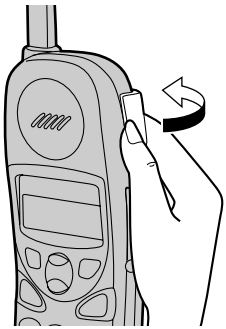
Belt Clip

You can hang the handset on your belt or pocket using the belt clip.

To attach the belt clip



To remove the belt clip

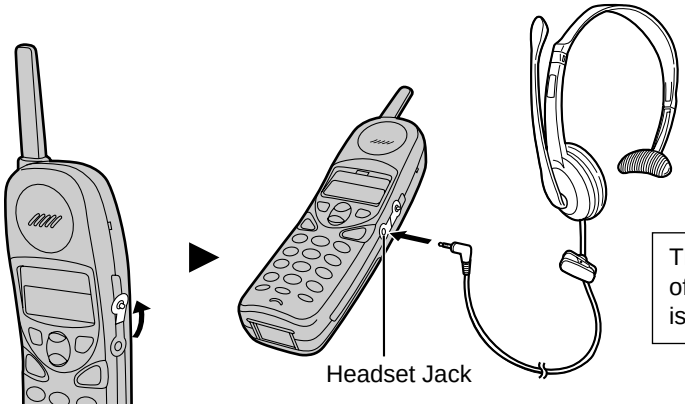


Optional Headset

Plugging an optional headset into the handset allows a hands-free phone conversation. Please use only a Panasonic KX-TCA86 or KX-TCA92 headset. To order, call the accessories telephone number on page 2.

Connecting an optional headset to the handset

Open the headset jack cover, and connect an optional headset to the headset jack as shown below.



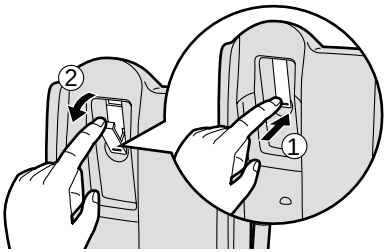
The illustration of the headset is KX-TCA86.

When an optional headset is connected to the handset, make sure to use the headset to talk with the caller. If you want to have a normal cordless phone conversation, disconnect the headset.

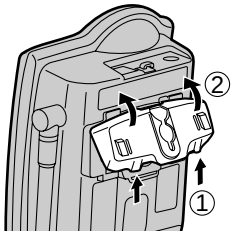
Wall Mounting

This unit can be mounted on a wall phone plate.

1 Push the lower side of the hook (①) and pull down the hook until it locks (②), **so the tab holds the handset**.

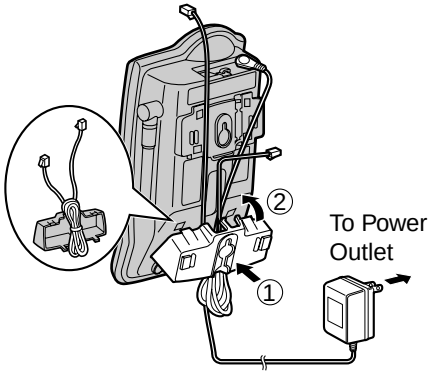


2 Remove the wall mounting adaptor.



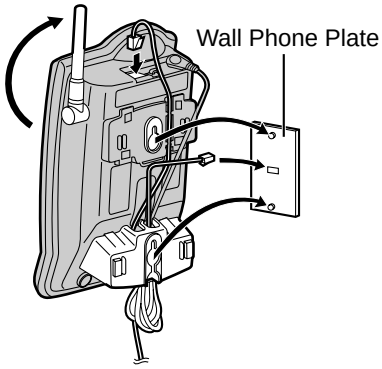
3 Connect the AC adaptor. Tuck the telephone line cord inside the wall mounting adaptor, then push it in the direction of the arrow (① and ②).

- The word “UP WALL” should face upward.



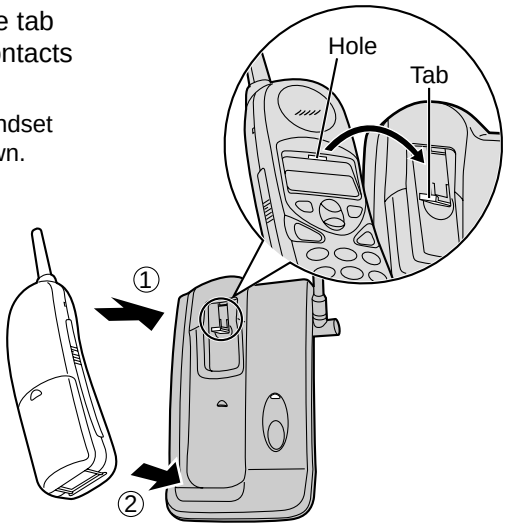
4 Connect the telephone line cord. Mount the unit, then slide down.

- Raise the antenna.



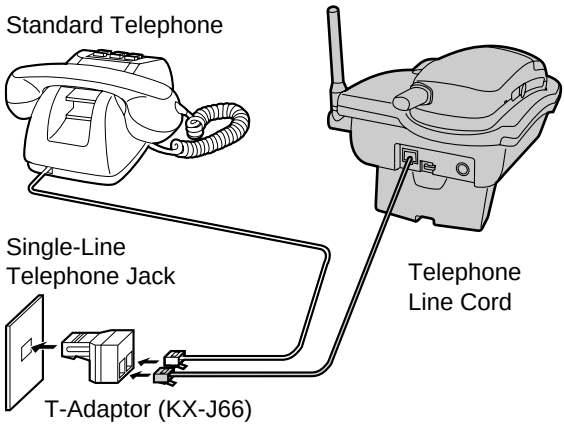
5 **To charge the battery:**
Fit the handset hole in the tab (①) and fix the charge contacts (②).

- Make sure to place the handset with the keypad facing down.
- The IN USE/CHARGE indicator lights.



Adding Another Phone

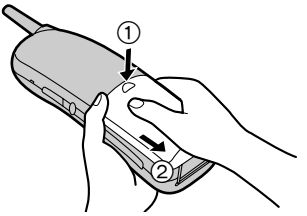
This unit will not function during a power failure. To connect a standard telephone on the same line, use the Panasonic T-adaptor KX-J66. To order, call the accessories telephone number on page 2.



Battery Replacement

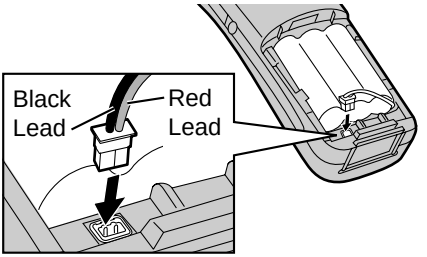
If "RECHARGE" and "" are displayed after a few telephone calls even if the battery was fully charged, replace the battery with a new Panasonic PQWBTC1461M (P-P504) battery. To order, call the accessories telephone number on page 2.

1 Press the notch on the handset cover firmly (①) and slide it as indicated by the arrow (②).



2 Remove the old battery. Then install the new one.

- Insert the battery plug into the connector as shown in the picture.
- Be sure wires are free from being pressed by the battery body or handset cover.



3 Close the cover. Make sure you charge the new battery for about 15 hours.

A nickel cadmium battery that is recyclable powers the product you have purchased. At the end of its useful life, under various state and local laws, it is illegal to dispose of this battery into your municipal waste stream. Please call 1-800-8-BATTERY for information on how to recycle this battery.

Troubleshooting

Problem	Cause and Remedy
The unit does not work.	●Check the settings (p. 7–9). ●Charge the battery fully (p. 8). ●Clean the charge contacts and charge again (p. 9). ●Install the battery properly (p. 8, 30). ●Place the handset on the base unit and unplug the AC adaptor to reset. Plug in, and try again.
An alarm tone sounds.	●You are too far from the base unit. Move closer and try again. ●Place the handset on the base unit and try again. ●Plug in the AC adaptor. ●Raise the base unit antenna.
Static, sound cuts in/out, fades. Interference from other electrical units.	●Locate the handset and the base unit away from other electrical appliances (p. 3). ●Move closer to the base unit. ●Raise the base unit antenna. ●Press **CH/FUNCTION** to select a clearer channel in the talk mode.
The handset does not ring.	●The ringer volume is set to OFF. Set to ON (p. 9). ●If a power failure occurs, the handset loses communication with the base. When power returns, place the handset on the base unit once then try again.
The handset display is blank.	●Install the battery properly (p. 8, 30). ●Charge the battery fully (p. 8).
You cannot program items, such as the dialing mode.	●Programming is not possible while the unit is in the talk mode or when viewing the Caller List/phone book. ●Do not pause for over 60 seconds while programming. ●Move closer to the base unit. ●▼ or ▲ may have been pressed when you picked up the handset. Press **OFF** and try again.

Problem	Cause and Remedy
You cannot store a name and phone number in the phone book.	●You cannot store an item in the phone book while the unit is in the talk mode. ●Do not pause for over 60 seconds while storing.
While programming or searching, the handset starts to ring and stops the program/search.	●To answer the call, press **/FLASH**. Start again from the beginning after hanging up.
The handset does not display the caller's name and/or phone number.	●You need to subscribe to a Caller ID service. ●Other telephone equipment may be interfering with your phone. Disconnect it and try again. ●Other electrical appliances connected to the same outlet may be interfering with the Caller ID information. ●Telephone line noise may be affecting the Caller ID information.
The display goes to the standby mode while viewing the Caller List.	●Do not pause for over 60 seconds while searching.
When a second call is received during a conversation, the unit does not display the new caller's name and/or phone number.	●The caller requested not to send his/her information. See page 14.
HANDSET LOCATOR does not function.	●The handset is too far from the base unit. ●The handset is engaged in an outside call. Wait until the IN USE/CHARGE indicator light goes out.

Problem	Cause and Remedy
You cannot redial by pressing **PAUSE/REDIAL**.	●When pressing **PAUSE/REDIAL** after **/FLASH**, more than 32 digits long number will not be redialed correctly. ●When pressing **/FLASH** after **PAUSE/REDIAL**, more than 24 digits long number will not be redialed correctly.
"RECHARGE" and " " are displayed or the handset beeps intermittently.	●Charge the battery fully (p. 8).
While talking, the call is disconnected.	●The battery needs to be recharged. Charge the battery fully (p. 8).
You charged the battery fully, but "RECHARGE" and " " are still displayed.	●Clean the charge contacts and charge again (p. 9). ●Install a new battery (p. 30).
The IN USE/CHARGE indicator light does not go out while charging.	●This is normal.
You cannot have a conversation using the handset.	●When an optional headset is connected (p. 27), you must use the headset to talk with the caller. To have a normal cordless phone conversation, disconnect the headset.
You cannot have a conversation using the headset.	●Make sure that the optional headset is connected properly (p. 27).
If you cannot solve your problem	●Call our customer call center at 1-800-211-PANA(7262). ●Panasonic's e-mail address for customer inquiries: consumerproducts@panasonic.com for customers in the USA or Puerto Rico ONLY

Important Safety Instructions

When using this unit, basic safety precautions should always be followed to reduce the risk of fire, electric shock, or personal injury.

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on this unit.
3. Unplug this unit from AC outlets before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this unit near water, for example, near a bathtub, washbowl, kitchen sink, or the like.
5. Place this unit securely on a stable surface. Serious damage and/or injury may result if the unit falls.
6. Do not cover slots and openings on the unit. They are provided for ventilation and protection against overheating. Never place the unit near radiators, or in a place where proper ventilation is not provided.
7. Use only the power source marked on the unit. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
8. Do not place objects on the power cord. Install the unit where no one can step or trip on the cord.
9. Do not overload wall outlets and extension cords. This can result in the risk of fire or electric shock.
10. Never push any objects through slots in this unit. This may result in the risk of fire or electric shock. Never spill any liquid on the unit.
11. To reduce the risk of electric shock, do not disassemble this unit. Take the unit to an authorized servicenter when service is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock when the unit is subsequently used.
12. Unplug this unit from the wall outlet and refer servicing to an authorized servicenter when the following conditions occur:
    A. When the power supply cord or plug is damaged or frayed.
    B. If liquid has been spilled into the unit.
    C. If the unit has been exposed to rain or water.
    D. If the unit does not work normally by following the operating instructions. Adjust only controls covered by the operating instructions. Improper adjustment may require extensive work by an authorized servicenter.
    E. If the unit has been dropped or physically damaged.
    F. If the unit exhibits a distinct change in performance.
13. During thunderstorms, avoid using telephones except cordless types. There may be a remote risk of an electric shock from lightning.
14. Do not use this unit to report a gas leak, when in the vicinity of the leak.

SAVE THESE INSTRUCTIONS

CAUTION:

To reduce the risk of fire or injury to persons, read and follow these instructions.

1. Use only the battery(ies) specified.
2. Do not dispose of the battery(ies) in a fire. They may explode. Check with local waste management codes for special disposal instructions.
3. Do not open or mutilate the battery(ies). Released electrolyte is corrosive and may cause burns or injury to the eyes or skin. The electrolyte may be toxic if swallowed.
4. Exercise care in handling batteries in order not to short the battery to conductive materials such as rings, bracelets, and keys. The battery and/or conductor may overheat and cause burns.
5. Charge the battery(ies) provided with or identified for use with this product only in accordance with the instructions and limitations specified in this manual.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR ANY TYPE OF MOISTURE.

- The AC adaptor is used as the main disconnect device, ensure that the AC outlet is located/installed near the unit and is easily accessible.

FCC and Other Information

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the bottom of this equipment is a label that contains, among other information, a product identifier in the format US:AAA-----.
If requested, this number must be provided to the telephone company.

Registration No. . . . . (found on the bottom of the unit)
Ringer Equivalence No. (REN) 0.1B

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3).

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with this equipment, for repair or warranty information, please contact a Factory Servicenter or other Authorized Servicer. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

WHEN PROGRAMMING EMERGENCY NUMBERS AND(OR) MAKING TEST CALLS TO EMERGENCY NUMBERS:
1) Remain on the line and briefly explain to the dispatcher the reason for the call.
2) Perform such activities in the off-peak hours, such as early morning or late evenings.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Privacy of communications may not be ensured when using this phone.

CAUTION:
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

Note:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

The USOC jack is RJ11C and the jack is Part 68 compliance.

FCC and Other Information

This equipment is hearing aid compatible as defined by the FCC in 47 CFR Section 68.316.

When you hold the phone to your ear, noise might be heard in your Hearing Aid. Some Hearing Aids are not adequately shielded from external RF (radio frequency) energy. If noise occurs, use an optional headset accessory or the speakerphone option (if applicable) when using this phone. Consult with your audiologist or Hearing Aid manufacturer about the availability of Hearing Aids which provide adequate shielding to RF energy commonly emitted by digital devices.

- **Environment**—do not place the unit in a room where the temperature is less than 5°C (41°F) or greater than 40°C (104°F). Allow 10 cm (4″) clearance around the unit for proper ventilation. Avoid excessive smoke, dust, mechanical vibration, shock, or direct sunlight.
- **Routine care**—wipe the unit with a soft cloth. Do not use benzine, thinner, or any abrasive powder. When you leave the unit unused for a long period of time, unplug the AC adaptor from the outlet.
- **If there is any trouble**—disconnect the unit from the telephone line and connect a known working phone. If the known working phone operates properly, have your unit repaired by one of the authorized Panasonic Factory Service Centers. If the known working phone does not operate properly, consult your telephone company.

Specifications

■ **Base unit**

Power Supply:	AC Adaptor (120 V AC, 60 Hz)
Power Consumption:	Standby: Approx. 3.1 W Maximum: Approx. 4 W
Frequency:	902.1 MHz – 904.05 MHz
Dimensions (H × W × D):	Approx. 89 mm × 127 mm × 180 mm (3 ½″ × 5″ × 7 3⁄32″)
Mass (Weight):	Approx. 260 g (0.57 lb.)

■ **Handset**

Power Supply:	Ni-Cd battery (3.6 V, 600 mAh)
Frequency:	925.9 MHz – 927.85 MHz
Dimensions (H × W × D):	Approx. 236 mm × 55 mm × 44 mm (9 9⁄32″ × 2 5⁄32″ × 1 23⁄32″)
Mass (Weight):	Approx. 230 g (0.50 lb.)
Security Codes:	65,000

■ **Dialing Mode:** Tone (DTMF)/Pulse

■ **Operating Environment:** 5°C – 40°C (41°F – 104°F)

Specifications are subject to change without notice.

Index

A

Accessories 2
Answering calls..... 12
Automatic Security Code
  Setting 25

B

Backlit LCD..... 12
Base Unit location..... 3
Battery, Charge 3, 8
Battery life..... 9
Battery replacement..... 30
Belt Clip 27

C

Call waiting caller ID 26
Call waiting tone 26
Caller ID, display 14
Caller ID service 12, 13
Caller List
  editing 17
  erasing..... 19
  storing..... 18
  viewing..... 15, 16
Calling back from Caller ID List .. 17
Channel (CH)..... 11
CID 18, 19

D

Dialing mode..... 10

F

FCC and other information 36
Function Menu..... 10

H

Handset Locator 25
Headset, optional..... 27

I

Installation
  AC adaptor 7
  Adding another phone 29
  Battery 8
  Telephone line cord..... 7

L

Language, display..... 10
Location of controls 5, 6

M

Making calls..... 11
Mute..... 12

P

PAUSE..... 26
Phone book..... 20
  dialing 22
  editing..... 23
  erasing..... 24
  finding..... 22
  name and symbols 21
  storing..... 20
Predial..... 11
Pulse service 25

R

Redial..... 11
Ringer Off 9
Ringer Volume 9
Rotary service, tone dialing 25

S

Safety Instructions 34
Shipping product for service 43
Specification 39

T

Troubleshooting 31

V

Volume control..... 12

W

Wall mounting..... 28
Warranty 41

PANASONIC CONSUMER ELECTRONICS COMPANY, DIVISION OF MATSUSHITA ELECTRIC CORPORATION OF AMERICA
One Panasonic Way
Secaucus, New Jersey 07094

PANASONIC SALES COMPANY, DIVISION OF MATSUSHITA ELECTRIC OF PUERTO RICO, INC.,
Ave. 65 de Infanteria, Km. 9.5
San Gabriel Industrial Park
Carolina, Puerto Rico 00985

Panasonic Telephone Limited Warranty

Limited Warranty Coverage

If your telephone (identified in your Operating Instructions) does not work properly because of a defect in materials or workmanship, Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the warrantor") will, for the length of the period indicated on the chart below, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

Parts	**Labor**
One (1) Year	One (1) Year

During the "Labor" warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty excludes both parts and labor for batteries, antennas, and cosmetic parts (cabinet). This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is". A purchase receipt or other proof of the original purchase date is required for warranty service.

To obtain service in the USA please contact:

Panasonic Services Company, Panasonic Plus Department
20421 84th Avenue South
Kent, WA 98032
Tel: 1-800-833-9626 Fax: 1-800-237-9080

For assistance in Puerto Rico call Panasonic Sales Company (787)-750-4300 or fax (787)-768-2910.

When shipping the unit carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone number where you can be reached.

Limited Warranty Limits And Exclusions

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, introduction of sand, humidity or liquids, commercial use such as hotel, office, restaurant, or other business or rental use of the product, or service by anyone other than a Factory Servicenter or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, lost calls or messages, cost of having someone remove or re-install an installed unit if applicable, travel to and from the servicer. The items listed are not exclusive, but are for illustration only.) **ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.

Customer Services Directory

For Product Information, Operating Assistance, Literature Request, Dealer Locations, and all Customer Service inquiries please contact: 1-800-211-PANA (7262), Monday-Friday 9 am-9 pm; Saturday-Sunday 9 am-7 pm, EST.
or send e-mail :
consumerproducts@panasonic.com
For hearing or speech impaired TTY users, TTY : 1-877-833-8855

Web Site: http://www.panasonic.com
You can purchase parts, accessories or locate your nearest servicenter by visiting our Web Site.

Accessory Purchases:

1-800-332-5368 (Customer Orders Only)
For hearing or speech impaired TTY users, TTY : 1-866-605-1277
Panasonic Services Company 20421 84th Avenue South, Kent, WA 98032
(6 am to 5 pm Monday - Friday; 6 am to 10:30 am Saturday; PST)
(Visa, MasterCard, Discover Card, American Express, Check)

Service in Puerto Rico
Matsushita Electric of Puerto Rico, Inc. Panasonic Sales Company/ Factory Servicenter:
Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985
Phone (787)750-4300 Fax (787)768-2910

For product service

- Call 1-800-211-PANA(7262) or 1-800-833-9626 for the location of an authorized servicenter.
- Panasonic's e-mail address for customer inquiries:
  consumerproducts@panasonic.com
  for customers in the USA or Puerto Rico ONLY

When you ship the product

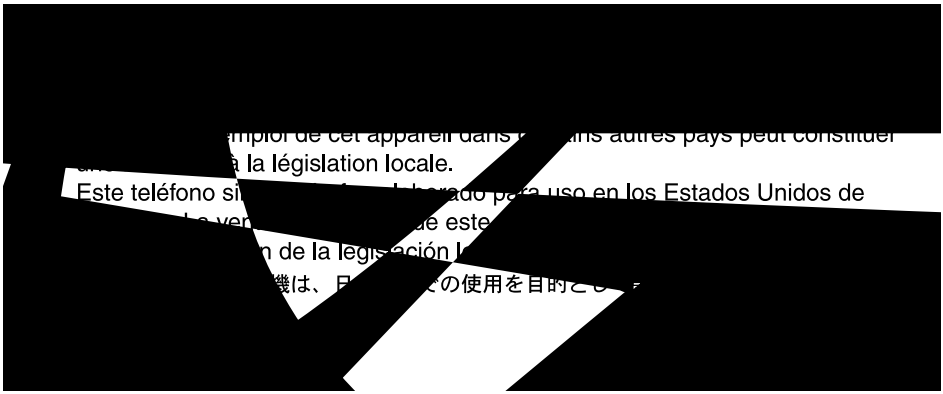
- Carefully pack your unit, preferably in the original carton.
- Attach a letter, detailing the symptom, to the outside of the carton.

Symptom

_____

_____

- Send the unit to an authorized servicenter, prepaid and adequately insured.
- Do not send your unit to the Panasonic Consumer Electronics Company listed on the back cover or to executive or regional sales offices. These locations do not repair consumer products.



If you need assistance with the set-up or operation, please call 1-800-211-PANA(7262)

Panasonic Consumer Electronics Company,
Division of Matsushita Electric Corporation of America
One Panasonic Way, Secaucus, New Jersey 07094

Panasonic Sales Company,
Division of Matsushita Electric of Puerto Rico, Inc.
Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park
Carolina, Puerto Rico 00985

PQQX13499ZC F0902-2033 Ⓓ